

**DEPARTMENT OF TRANSPORTATION****DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
690 Walnut Ave.St. 150  
Vallejo, CA 94592-1133  
(707) 649-5453  
(707) 649-5493

Contract #: 04-0120F4Cty: SF/Ala Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-012659**Date Inspected:** 16-Mar-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 1900**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 700**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** See below**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Tower and OBG Components**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance Inspector (QA Inspector) George Goulet was present during the times noted above for observations relative to the work being performed.

**Bay 10**

This QA Inspector randomly observed the following work in progress in Bay 10:

SMAW welding of weld joints SSD1-TL5-1B-F-36A, 3A located outside PCMK south tower, lift 5, skins A/E corner. Welder was identified as 050289. ZPMC QC was identified as CWI Du Zhi Qun (QC1). Assisting QC1 at this location and appearing to be monitoring the welding and recording data was QC Sun Tian Liang. The welding variables recorded by QC1's assistant appeared to comply with WPS-B-T-3211-TC-U5b-1. Also present at this location and appearing to be monitoring the welding related operations were ABF Representative Li Nan.

SMAW repair welding of weld joints SSD1-TL5-1B-F-39B, 17A located inside PCMK south tower, lift 5, skins C/D corner. Welder was identified as 500363. ZPMC QC was identified as QC1. The welding variables recorded by QC1 appeared to comply with WPS-485-SMAW-1G(1F)-repair-1. Also present at this location and appearing to be monitoring the welding related operations were ABF Representative Li Nan.

**Bay 11**

This QA Inspector randomly observed no apparent welding related work being performed in Bay 11.

**Heavy Dock**

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This QA Inspector randomly observed the following work in progress on the Heavy Dock:

FCAW welding of weld joint NSD1-SA76F/H-39 located outside PCMK north tower, lift 1 base, skin E, shear plate stiffener to connection plate. Welder was identified as 053869. ZPMC QC was identified as ZPMC CWI You Qi Guo (QC2). The welding variables recorded by QC2 appeared to comply with WPS-B-T-2333-TC-P4-F.

FCAW welding of weld joint NSD1-SA76F/H-40 located outside PCMK north tower, lift 1 base, skin E, shear plate stiffener to connection plate. Welder was identified as 040533. ZPMC QC was identified as QC2. The welding variables recorded by QC2 appeared to comply with WPS-B-T-2333-TC-P4-F.

FCAW welding of weld joint NSD1-SA11-23 located outside PCMK north tower, lift 1 base, skin B, shear plate stiffener to connection plate. Welder was identified as 057244. ZPMC QC was identified as QC2. The welding variables recorded by QC2 appeared to comply with WPS-B-T-2333-TC-P4-F.

FCAW welding of weld joint NSD1-SA11-26 located outside PCMK north tower, lift 1 base, skin B, shear plate stiffener to connection plate. Welder was identified as 054069. ZPMC QC was identified as QC2. The welding variables recorded by QC2 appeared to comply with WPS-B-T-2333-TC-P4-F.

FCAW welding of weld joint WSD1-SA225F/H-29 located outside PCMK west tower, lift 1 base, skin E, shear plate stiffener to connection plate. Welder was identified as 066481. ZPMC QC was identified as QC2. The welding variables recorded by QC2 appeared to comply with WPS-B-T-2333-TC-P4-F.

FCAW welding of weld joint WSD1-SA225F/H-49 located outside PCMK west tower, lift 1 base, skin E, shear plate stiffener to connection plate. Welder was identified as 068493. ZPMC QC was identified as QC2. The welding variables recorded by QC2 appeared to comply with WPS-B-T-2333-TC-P4-F.

FCAW welding of weld joint WSD1-SA279-7 located inside PCMK west tower, lift 1 base, skin B, shear plate stiffener to connection plate. Welder was identified as 205649. ZPMC QC was identified as QC2. Assisting QC2 at this location and appearing to be monitoring the welding and recording data was ZPMC QC He Gen, who was not a CWI. The welding variables recorded by QC2's assistant appeared to comply with WPS-B-T-2333-TC-P4-F.

FCAW welding of weld joints ESD1-SA225F/H-7, 23 located inside PCMK east tower, lift 1 base, skin E, shear plate stiffener to connection plate. Welder was identified as 070022. ZPMC QC was identified as QC2. Assisting QC2 at this location and appearing to be monitoring the welding and recording data was ZPMC QC He Gen, who was not a CWI. The welding variables recorded by QC2's assistant appeared to comply with WPS-B-T-2333-TC-P4-F.

The tower access elevator was not manned between 2030 hours and 2130 hours and it appeared that no work was being performed above the base level of either of the towers.

OBG segments 5E, 5W, and CB4 were located on the ship moored to the foot of the heavy dock. No apparent welding related work was observed being performed on either OBG segments 5E, 5W, or CB4.

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Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

### Summary of Conversations:

No significant conversations.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Skyler Guest, 150-0042-2360, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Goulet, George	Quality Assurance Inspector
<b>Reviewed By:</b>	Dawson, Paul	QA Reviewer

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